Airline Safety Data and How It Is Used

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Program

1. Delta Aviation Safety Department
2. Delta Aviation Safety Reporting Systems
   – Self Reporting
   – Regulatory Reporting
   – Operations Control Center (OCC)
   – Tech Ops and Ground Safety Reports
   – Voluntary Programs-Advanced Qualification (AQP), Flight Operations Quality Assurance (FOQA) and ASAP
3. R/W -Taxi Incursions and Excursions
   – LAS Taxiway excursion
   – SLC RW 35 HS
4. Conclusion

Delta Aviation Safety Dept.

- Captain Mike New-Director

- Ralph Hicks-General Manager
  - 6 Data Collection Analysts
  - 5 Safety Investigators
  - 5 Line Safety Coordinators (LSC)

Delta Aviation Safety Reporting Systems

Self Reporting

1. Safety Hotline-Anonymous, rec'vd by Safety dept., all employee groups.

2. Crew Operations Report-Flight Crew reporting, not protected, to Flight Ops

3. FACTS-F/A reporting, similar to COR

Regulatory Reporting

1. Federal Agencies requesting info. Regarding pilot deviations, operational errors and significant events.

2. Aviation Safety is cc'd by Flight Standards Dept.

Operations Control Center-OCC

- OCC tracks and controls Delta Ops 24-7-365

- Dispatchers, in-flight, duty pilot, load control, security, etc. Send out msgd regarding significant events.

- Aviation Safety Investigator, on call filters data and enters into Aviation Quality Database (AQD).

Tech Ops

Tech Ops Reliability Report

-daily performance data distributed

-data on engine replacements, lav discrepancies, diversions, rejected T/Os, etc.

- Significant maintenance actions are recorded and distributed

Ground Safety Reports

- Maintenance Control Coord. Collect damage info. and assoc. delays

- Safety Tracking System (STARS) , collects info on corporate Safety and ground safety events.

Examples- slide deployments, cargo, aircraft damage (bird strikes, tail strikes, etc) OSHA events, cargo, FOD.

Voluntary Programs

1. Advanced Qualification Program (AQP)

-joint program with FAA to monitor trng prog.

-training sessions are monitored and scored, low score skills are tracked.

-Concept is that low score skills in trng also occur in regular line ops.

-all info is de-identified.

Aviation Safety Action Partnership

ASAP

-joint program-FAA, Delta, ALPA-partnership creates a Event Review Committee-ERC

-Employee group can submit a report about a hazard or an error.

-reports are reviewed by ERC and action is based on a group decision.

ASAP cont.

- Info. about an error identified by other sources has minimum punitive impact on the reporter. Each partnership has guidelines and max. penalties.

Delta currently has ASAP program for tech ops and dispatchers. Flight ops is restructuring.

Flight Operations Quality Assurance (FOQA)

- Aircraft data is recorded and down loaded.

- Decodes engineering data and de-identifies data. Keeps day, time, city pair.

- Flag raised on pre-set limitations.

- Flags are analyzed on identifying limitations for trend analysis.

Example- High energy MCO approaches flagged.

LAS Taxiway excursion 7-06

- Situation
  - 737-800
  - Night visual conditions, clear
  - Landed R/W 25L, exited at taxiway A-7, cleared to taxi to ramp via B-5 intersection
  - Departed taxi-way just east of A5 intersection
- Factors
  - high workload clearing R/W background light from city lights
  - pavement changed from blacktop to concrete
  - little elev change and no vegetation in island
  - Taxi edge lights gave a false presentation of taxiway to pilots
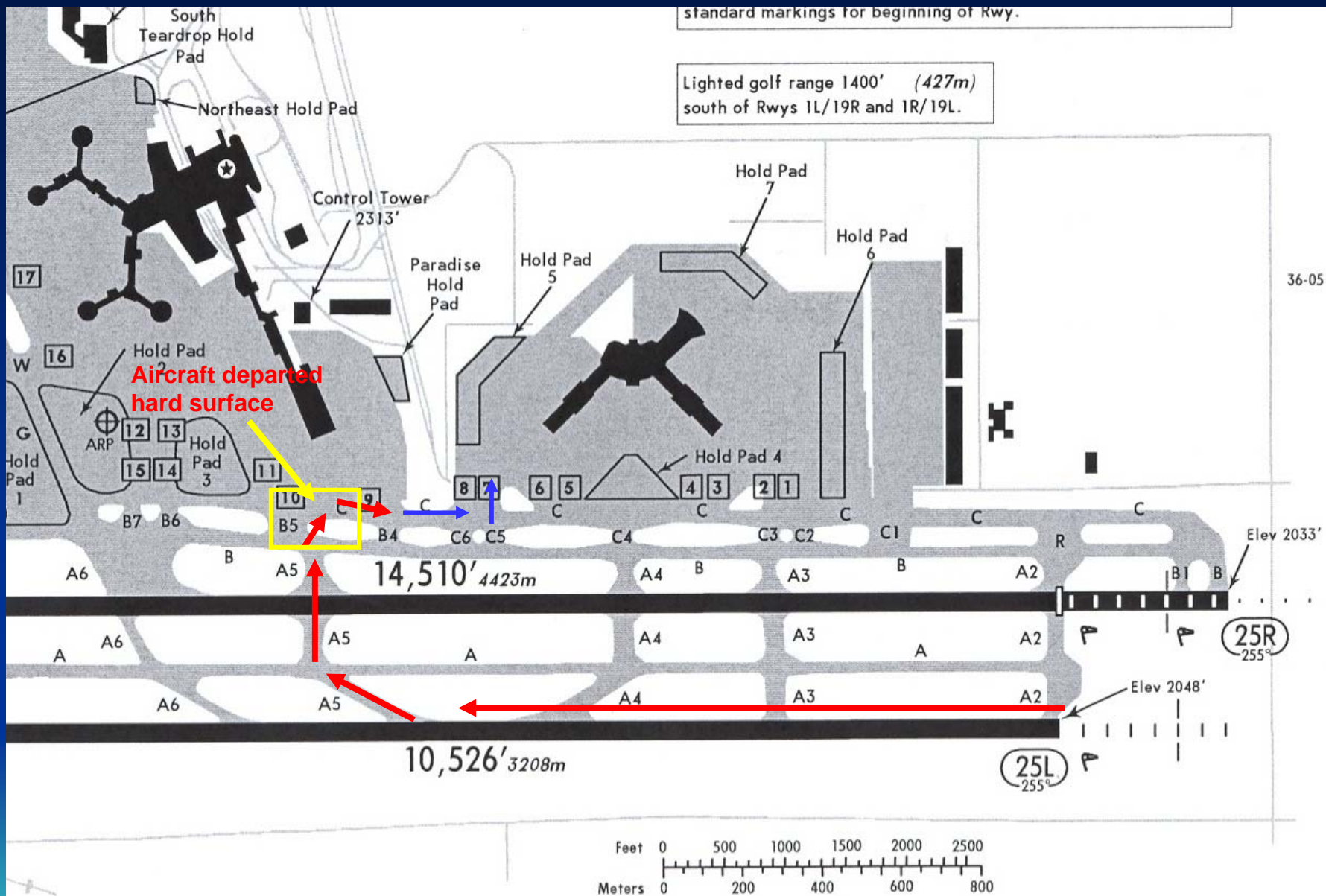
# Las Vegas 7-06

Main Gear tracks across island

Las Vegas July 2006

- Recommendations
  - Highlight challenging taxi conditions on "green pages"
  - Work with LAS airport operations to install 30" reflective plastic tip sticks to outline the off taxi way island
  - Reflective tip sticks were installed within 30 days resulting in a very well defined taxiway

SLC RW 35 HS Oct 2006

- Situation
  - B-757 SLC-MCO, day meteorological conditions
  - Aircraft cleared to taxi to R/W 35 via H,H6,Q and R/W 32-14
  - F/O was completing checklists when aircraft crossed the hold-short line for 35 that is located on R/W 32-14
  - Crew was familiar with airport
  - Second time in 30 days that incident happened at this spot
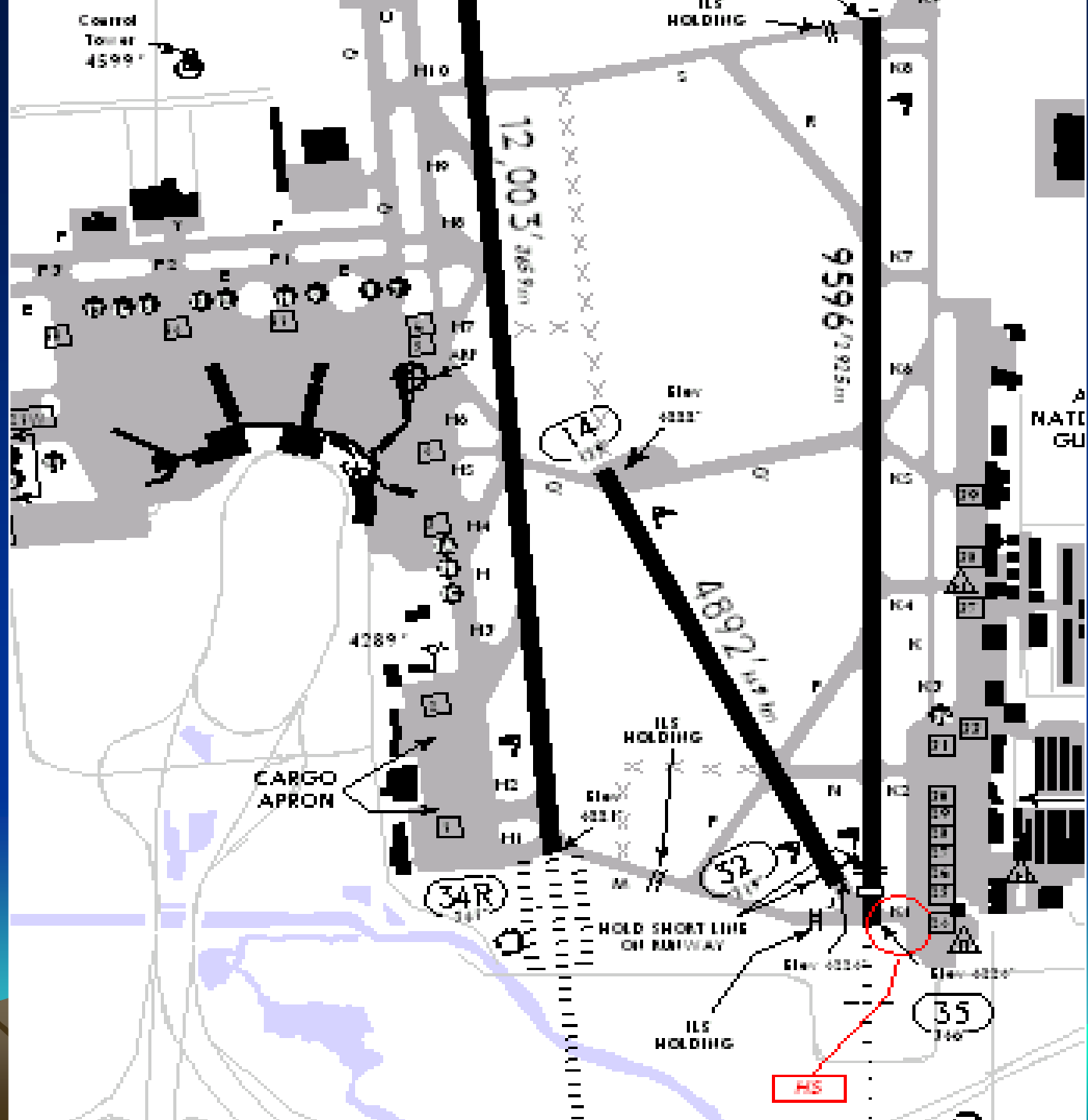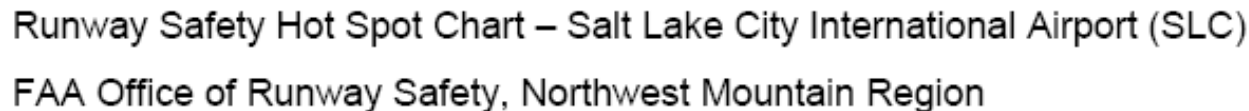
Hold short on RW 14/32

Hold short looking South

Salt Lake City Oct 2006

- Recommendations
  - Communications-Flight plan remarks,10-9.
  - Highlight hot spot on airport diagram
  - Training-crew coordination in taxing, procedures
  - Repaint the hold short markings (July 2007)
  - Wig-Wag lights (installed July 2008)

Salt Lake City Oct 2006

Runway Safety Hot Spot Chart – Salt Lake City International Airport (SLC)

FAA Office of Runway Safety, Northwest Mountain Region

Salt Lake City Oct 2006

Pilots taxiing on Runway 14/32 for takeoff on Runway 35 must use extreme caution to stop prior to the runway hold line. Watch carefully for holding position signs, markings and runway guard lights. Multiple runway incursions have occurred at this spot with pilots crossing the hold line when told to hold short.

Holding Position Sign (both sides)

Runway Guard Lights (both sides)

Runway Safety Hot Spot Chart – Salt Lake City International Airport (SLC)

FAA Office of Runway Safety, Northwest Mountain Region

Conclusion

1. Quality data collection and analysis are critical to safety investigations.

2. Group dynamics provides better results.

3. Communications can always be improved.

Questions??

THANKS

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